

LESSON TITLE: GROUP DECISION-MAKING, CONFLICT MANAGEMENT

LESSON OBJECTIVES:

TEACHING METHOD: Student led, group problem solving.

CONTACT HOURS: 1 Hour

READING: Scenario provided at the beginning of lesson.

MATERIALS REQUIRED: Paper Hand out and chalkboard

LESSON OUTLINE:

ATTENTION: Put on chalkboard: "1 plus 1 equals 3" and ask how many have heard the saying "Two heads are better than one?" This saying implies that group decisions are better for obvious reasons.

OVERVIEW: During this period, you'll get an opportunity to see group decision-making in action. In a minute, I'll pass out the decision worksheet for the NASA Moon exercise and explain how the exercise will be conducted.

STRATEGY: The class is intended to show students the effect of group decision-making and how groups often make better decisions than individuals.

SEQUENCE OF EVENTS:

<u>Activity</u>	<u>Minutes</u>
Introduction	5
Individual Ranking	5
Group Ranking	15
Computation of Ranking	5
Discussion	25
Conclusion	<u>5</u>
Total Time	60

B. Read the following instructions to the flight.

"You are a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. Due to mechanical difficulties, however, your ship was forced to land at a spot, 200 miles from the rendezvous point. During landing, much of the equipment aboard was damaged and since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200-mile trip. Listed are the 15 items left intact and undamaged after landing. As individuals, rank-order the 15 items in terms of their importance in allowing your crew to reach the rendezvous point. Place a number 1 by the most important item, a 2 by the second most important, and so on, through number 15, the least important. You are allowed 5 minutes to accomplish the task."

NASA Exercise

box of matches
food concentrate
50 feet of nylon rope
parachute silk
portable heating unit
two .45 caliber pistols
one case dehydrated canned milk
two 100lb tanks of oxygen
stellar map (of moon's constellation)
life raft
magnetic compass
5 gallons of water
signal flares
first-aid kit with injection needles
solar-powered FM receiver-transmitter

- C. **After 5 minutes**, tell the students to stop their work as individuals. Announce that the entire group must rank the material and produce a ranking for the group. (Don't tell them that they will have to make this ranking until they have finished their individual lists.) Each member must agree upon the ranking of each item before it becomes part of the group's decision.

There are three rules for the group:

1. Averaging is not allowed.
2. Majority rule votes are not permitted.
3. The group has 15 minutes to complete the exercise

- D. After a maximum of 15 minutes group work, tell the group to stop work and show them how the astronauts ranked them and why they ranked them that way.
1. *Two 100-pound tanks of oxygen*: most pressing survival need
 2. *Five gallons of water*: replacement for tremendous liquid loss on lighted side
 3. *Stellar map of the moon's constellation*: primary means of navigation
 4. *Food concentrate*: efficient means of supplying energy requirements
 5. *Solar-powered FM receiver-transmitter*: for communication with mothership; but FM requires line-of-sight transmission and has a shorter range
 6. *Fifty-feet of nylon rope*: useful in scaling cliffs, tying injured together
 7. *First-aid kit containing injection needles*: needles for vitamins, medicines, etc.; will fit special aperture in NASA space suits
 8. *Parachute silk*: protection from sun's rays
 9. *Self-inflating life raft*: CO bottle in military raft may be used for propulsion
 10. *Signal flares*: distress signal when mothership is sighted
 11. *Two .45-caliber pistols*: possible means of self-propulsion
 12. *One case of dehydrated evaporated milk*: bulkier duplication of food concentrate
 13. *Solar-powered portable heating unit*: not needed unless on dark side
 14. *Magnetic compass*: magnetic field on moon is not polarized; worthless for navigation
 15. *Box of matches*: no oxygen on moon to sustain the flame; virtually worthless

- E. Instruct students to look at their individual worksheets and check their rankings against the group's and astronaut's ranking.
- F. The key concept is conclusions, or decisions, based on contributions from several different sources, are often more complete than those based on the opinions of an average individual.

G. QUESTIONS AND ANSWERS

Q: What did this exercise demonstrate about the effectiveness of group decision-making?

A: Decisions made by the group were better than those made by the individual. However, if this was not the case, let the students discuss what did happen and why.

Q: Is it always going to be better to make decisions as a group? Why not?

A: Students should consider the nature of the problem, time limits, the problem, etc.

Q: What problems did you experience within your group?

A: Let students give their views.

SUMMARY

As a result of this exercise, you can now see that, in fact, two heads are better than one. The goal of teamwork is not to think alike, but to think together.

LESSON OPR: National Headquarters, Civil Air Patrol

This lesson last revised: 23 April 2002